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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/069,732

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Hiroaki Nemoto

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7590

08/25/2008

MATTINGLY, STANGER, MALUR & BRUNDIDGE, P.C.

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SUITE 370

ALEXANDRIA, VA 22314

EXAMINER

PSITOS, ARISTOTELIS M

ART UNIT

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/069,732	Applicant(s) NEMOTO ET AL.	
	Examiner Aristotelis M. Psitos	Art Unit 2627	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 June 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 18-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 18-22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Applicants' response of 6/18/08 has been considered with the following results.

Claims 14-17 and 23 have been canceled as being drawn to a non-elected invention.

Nevertheless, as noted in the previous OA, claim 22 is drawn to the disclosure with respect to figure 13. The invention drawn to such an embodiment has NOT BEEN ELECTED.

Drawings

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the "means for controlling the orientation", the ultimate claimed means in claim 18 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Objections

Claim 22 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form.

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As now presented, although claim 22 is dependent upon claim 18, such is not the elected invention, i.e., the elected invention is drawn to a two swing arm embodiment and not a single arm embodiment.

In addition, although applicants have amended the independent claim to now recite "...reproducing and recording apparatus ..." dependent claims 19-22 do not properly include such amended language. Proper correction is required. No 112 rejection of these dependent claims predicated upon such an omission is presented in this OA, nevertheless absent a proper response; such a rejection will be introduced in any subsequent OA.

Response to Arguments

Applicant's arguments filed 6/18/08 have been fully considered but they are not persuasive, see the above divergence of claimed invention(s) as discussed above with respect to claim 22.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

1. Claim 22 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter, which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

As indicated in the above objection to claim 22, claims 18 and 19 require two separate swing arms, one for the magnetic flux detecting means and a separate one for the heating means.

This is drawn to the elected invention with respect to figure 10.

However, claim 22 then attempts to place all the elements into a single slider, i.e., drawn to the disclosure with respect to the third embodiment – figure 13 - A NON elected invention. The attempt to then imply that the elected invention is in fact a single swing arm IS NOT in keeping with the disclosed invention elected.

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. There is no such disclosure as originally filed with the two separate swing arms. Hence this claim is now drawn to NEW MATTER. Cancellation of such is respectfully required.

No art rejection is made on such a dependency.

Response to Arguments

Applicant's arguments filed 6/18/08 have been fully considered but they are not persuasive, for the reasons stated above.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claims 18-22 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

As now presented, claim 18 has been amended to include an appropriate control means and function thereof - the ultimate means claimed in claim 18. However, there is NO disclosure with respect to the elected embodiment (2nd embodiment) that discloses such a capability. There is no tie in with any control means for orientation for the shape of the heated area as claimed disclosed in the elected embodiment.

Response to Arguments

Applicant's arguments with respect to these claims have been considered but are moot in view of the new ground(s) of rejection.

Since the elected invention requires two swing arms, the argued position that the sentence bridging pages 11 and 12 of the disclosure fail to disclose the appropriate means for controlling the orientation since this passage refers to the control when the heating means is formed on the swing arm supporting the magnetic flux - the unelected invention.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

3. Claims 18-22 are rejected under 35 U.S.C. 112, second paragraph, as failing to set forth the subject matter which applicant(s) regard as their invention. Evidence that claims 18-22 fail(s) to correspond in scope with that which applicant(s) regard as the invention can be found in the reply filed 6/18/08. In that paper, applicant has stated that support for the newly introduced means is found in the sentence bridging pages 11 and 12 of the disclosure, however this statement indicates that the invention is different from what is defined in the claim(s) because as further noted above, the following sentence ONLY provides for the control means in accordance with the NON-ELECTED embodiment of figure 13.

Response to Arguments

Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection. See the above position, i.e., claims drawn to the disclosure with respect to non-elected invention.

Claim Rejections - 35 USC § 102

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

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invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

4. Claims 18-22 are rejected under 35 U.S.C. 102a/b as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Murakami et al further considered with the acknowledged prior art..

Murakami et al discloses a magneto-optical system, having appropriate transducer assemblies.

As noted in the figures, the optical head (1) heats the record medium. The magnetic head, element 12 functions as recited. The examiner interprets these assemblies as meeting the claimed "swing arm", in both claim 18 and 19. Wrt the desired functional result of claim 21, see the description of figures 3, 5, 6 and 7 starting at col. 7 line 29. The examiner interprets the operation/description thereof as meeting this claims limitations.

Furthermore, under 102 considerations, with respect to the newly inserted terminology/means for controlling the orientation of the heating means, such an element is considered inherently present, i.e.,

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see the abstract, as well as the disclosure starting at col. 4 line 8 till col. 5 line 4 and col 8. starting at line 36.

Alternatively, if applicants can convince the examiner that such an element/means and function is not inherently presented, then under 103 considerations the examiner further relies upon the acknowledged prior art tracking control capabilities as discussed in the present specification starting at page 24 line 18.

It would have been obvious to modify the base system of Murakami et al with the above acknowledged prior art tracking servo systems, motivation is to ensure proper tracking by use of well known servo mechanism/techniques present in the prior art for the inherent result – proper tracking.

Response to Arguments

Applicant's arguments filed 6/18/08 have been fully considered but they are not persuasive for the reasons stated above with respect to the 102 rejection, and are moot in view of the new ground(s) of rejection as stated under the 103 considerations.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Miyake et al, Wakabayashi et al, Shimazaki et al, and Ueyangi – magneto-optic system with appropriate transducers.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

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the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Aristotelis M. Psitos whose telephone number is (571) 272-7594. The examiner can normally be reached on M-Thur: 6:00 - 3:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William R. Korzuch can be reached on (571) 272-7589. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Aristotelis M Psitos
Primary Examiner
Art Unit 2627

/Aristotelis M Psitos/

Primary Examiner, Art Unit 2627

Claim Rejections - 35 USC § 103

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

3. Claims 18-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over the acknowledged prior art document to Saga et al, identified as 13-B-03 or 13-B-04, and further considered with 6-76307

claim 1

Article to Saga et al

An information recording/reproducing
apparatus for recording information by
forming an information pit determined by
a magnetic domain on a track in a
magnetic recording disk, said information
pit being formed by applying a magnetic
recording field and heating a certain portion of the track,
comprising:

see title/abstract

means for heating the information pit by generating
a heated area on the track

see the description
description

a magnetic head for applying the
magnetic field to the information pit and for
sensing the information pit on the track;

GMR head

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a swing arm for holding and positioning the magnetic head to desired portions of the track;
and
said magnetic head including a magnetic flux detecting means, see JP 06-76307
the GMR head

wherein an orientation of a shape of the heated area with respect to the track is controlled according to a radial position on the disk so that the orientation is coincident with a longitudinal direction of the magnetic flux detecting means according to the track. inherent result see analysis below

Claim 19.

An information recording/reproducing apparatus according to claim 18, further comprising:
a second swing arm for holding and positioning the means for heating the information pit to a predetermined portion on the track. see below analysis

As far as the examiner can ascertain from the above noted figures and their associated disclosure, the claimed elements of claim 18 are present in the overall combination of references.

Either of the Saga et al systems depicts a figure wherein

a) in the 13-B-03 system a heating element the laser diode in figure 1, and a GMR sensor (magnetic head) are provided for in opposing thermo-recording system, wherein the light source forms a

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heated areas (circular light spots is on one side of the record medium and the interaction of the magnetic flux by way of the magnetic elements) see the descriptions of the above noted figure.

b) in the 13-B-04 system, a laser diode is provided and an MR head is also provided opposing each other.

Although the elements are on transducer arms, it is not clear if the arm is indeed a swing arm.

In this environment, either linear arms, or swing arms are well known for the movement across the record medium.

JP 6-76307 depicts in this environment two swing arm elements opposing the record medium. The examiner interprets these arms as meeting the swing arm limitations.

It would have been obvious to modify the base system of either the above acknowledge prior art systems, with the appropriate swing arm teaching from the JP reference, motivation is to provide for an appropriate arm and move the elements radially across the disc as required in order to read/write the information. The use of well known swing arms for their inherent ability is considered obvious to one of ordinary skill in the art, especially since no unexpected results are seen to occur from using such well known elements.

With respect to the wherein clause – this is interpreted as a desired result and such must inherently follow from the structure, i.e., elements positively recited from the remainder of the claim. If this is incorrect, then as identified above with respect to the rejection as stated in paragraph 2 above, this result is a function of unclaimed elements and hence the claims fail to particularly point out and distinctly claim the invention.

With respect to claim 19, i.e., a second swing arm is also present in the JP system.

With respect to claim 20, such is considered present, i.e., an optical device for forming a light spot on the track is also present in the above base systems.

With respect to claim 21, the distances being substantially the same is also considered obvious from the above combined elements. Again, such desired results must follow from the structure of elements positively recited.

Response to Arguments

Applicant's arguments filed 7/13/07 have been fully considered but they are moot in view of the new grounds of rejection.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Mohri et al and Yanagawa et al are cited as illustrative of positioning capabilities in this environment using linear arm arrangements. Kang et al is cited as a mutli-head optical system.